



UNITED STATES PATENT AND TRADEMARK OFFICE

117A
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,411	12/03/2001	Franklin Zhigang Zhang		3112

7590
Franklin ZhiGang Zhang
4717 Spencer Street
Torrance, CA 90503

12/26/2006

EXAMINER

FERRIS, DERRICK W

ART UNIT	PAPER NUMBER
----------	--------------

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/26/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/006,411

Applicant(s)

ZHANG, FRANKLIN ZHIGANG

Examiner

Derrick W. Ferris

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/03/2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/26/2006 has been entered.

Response to Arguments

2. This Office action is in response to applicant's paper filed 10/26/2006. **Claims 28-48** as newly added are in consideration for this application.

3. All prior art rejections are withdrawn based on the claims as necessitated by amendment. Per applicant's request, the examiner placed emphasis on an IP backbone connecting access points. As such, please see the new rejection(s) below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 28-32, 35, 44, 45 and 47** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 to *Dantu et al.* ("*Dantu*") in view of "The Internet: a tutorial" to *Crowcroft*.

As to **claim 28**, a plurality of wireless Access Points with Internet Connections and providing wireless network access is taught as wireless routers 30, see e.g., figures 1, 3, 6, and 15 of *Dantu*. See also column 6, lines 4-45 of *Dantu*. A plurality of Personal Mobile Access Device (PMAD) with wireless network capability for getting wireless Internet access via said AP, and client operation function means with said server means is taught as mobile devices 44 in figure 1 of *Dantu*. See also column 6, lines 46-59 of *Dantu*. Wherein said PMAD is a personal mobile communication device with user and media interfaces, and wireless networking means to communicate with said APs is taught e.g., at column 6, lines 46-59 of *Dantu*. Whereby the PMAD access the Internet wirelessly through the AP and communicate with a server means via (the) Internet is taught e.g., in figure 1 since the wireless routers communicate through the wireline-specific router topology.

Dantu may be silent or deficient to the further limitation one server means running over the Internet. Thus it may also not be clear from the reference that whereby the APs communicating with the server means via the Internet; whereby the server means enables, controls, and guarantees the PMAD to PMAD communication over the Internet without message loss; and whereby the PMADs communicate with each other via the server means and Internet. As such, for the purpose of the rejection, see e.g., figure 1 where the “server means” is such as the control layer 13. The examiner notes that it may not be clear from the figure that the control layer 13 is found on a server within the Internet, see e.g., figure 3 of *Dantu* and column 5, lines 34-50. The servers provided in the control layer further ensure that there is no message loss within the network.

Art Unit: 2616

Crowcroft teaches the further recited limitation above at e.g., left-hand column on page 113.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Dantu* by clarifying that it is well known in the art prior to applicant's invention to implement the control layer applications 13 on servers on the Internet.

As such, the examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to use a common protocol such as IP to provide control layer services. In particular, *Dantu* cures the above-cited deficiency by providing a motivation shown e.g., in figure 1 with respect to an all IP network.

As to **claim 29**, *Dantu* teaches mobility management, see e.g., top of column 7.

As to **claim 30**, see similar rejection to claim 28. In addition, the examiner notes that the Time Distributed Message Network and Internet are simply domains within the Internet, see e.g., figure 1 on *Crowcroft*.

As to **claim 31**, the examiner hereby takes Office Notice that it would have been obvious and well known in the art to perform buffering on a server on the Internet. As such, the technical line of reasoning would be that by buffering data, the data is not lost (i.e., there is no interruption of data).

As to **claim 32**, the wireless and wireline networks further support QoS, see e.g., column 5, lines 33-45 with respect to QoS manager and column 11, lines 13-31.

Art Unit: 2616

As to **claim 35**, see similar rejection to claim 29.

As to **claim 44**, see similar rejection to claim 31.

As to **claim 45**, see e.g., figure 3 of *Dantu* where virtual control and security data links are setup for a call.

As to **claim 47**, see similar rejection to claim 29.

6. **Claim 33** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 to *Dantu et al.* ("*Dantu*") in view of "The Internet: a tutorial" to *Crowcroft* in further view of "Domain-based access control for distributed computing systems" to *Robinson et al.* ("*Robinson*").

As to **claim 33**, *Dantu* and *Crowcroft* disclose limitations in the base claim.

Dantu and *Crowcroft* are silent or deficient to the further limitation of using a three-level hierarchical domain system.

Robinson teaches the further recited limitation above at e.g., figure 3.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Dantu* and *Crowcroft* by clarifying that the server means also forms a three-level hierarchical domain.

As such, the examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to provided domain-based access control. In particular, *Robinson* cures the above-cited deficiency by providing a motivation found at e.g., left-hand column on page 161.

Art Unit: 2616

7. **Claims 34 and 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 to *Dantu et al.* (“*Dantu*”) in view of “The Internet: a tutorial” to *Crowcroft* in further view of U.S. Patent No. 6,360,093 B1 to *Ross et al.* (“*Ross*”).

As to **claim 34**, *Dantu* and *Crowcroft* disclose limitations in the base claim.

Dantu and *Crowcroft* are silent or deficient to the further limitation of wherein said plurality of PMADs can perform group communication.

Ross teaches the further recited limitation above at e.g., figure 3 and column 1, line 66 – column 2, line 14.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Dantu* and *Crowcroft* by clarifying that it well known in the art to perform group communication over the Internet.

As such, the examiner notes that it would have been obvious to one skilled in the art prior to applicant’s invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to provide push-to-talk services. In particular, *Ross* cures the above-cited deficiency by providing a motivation found at e.g., column 1, line 66 – column 2, line 14.

As to **claim 46**, see similar rejection to claim 34.

8. **Claims 36-40, and 43** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 to *Dantu et al.* (“*Dantu*”) in view of “The Internet: a tutorial” to *Crowcroft* in further view of U.S. Patent No. 6,992,982 B1 to *Meyer et al.* (“*Meyer*”).

As to **claim 36**, see similar rejection to claim 28.

Dantu and *Crowcroft* are silent or deficient to the further limitation of using a three-level hierarchical domain system.

Meyer teaches the further recited limitation above at e.g., the abstract. See also figure 4 where the packets are sent over the Internet.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Dantu* and *Crowcroft* by clarifying that it is well known in the art to divide up messages before sending them over the Internet.

As such, the examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to improve communications over the Internet. In particular, *Meyer* cures the above-cited deficiency by providing a motivation found at e.g., column 3, lines 27-33.

As to **claim 37**, see e.g., *Meyer* where the packets are segmented and then reassembled at the host.

As to **claim 38**, see similar rejection to claim 36 where the TDMUs are the segments sent over the network.

As to **claim 39**, see similar rejection to claim 31.

As to **claim 40**, see similar rejection to claim 32.

As to **claim 43**, see similar rejection to claim 29.

9. **Claim 41** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 to *Dantu et al.* ("*Dantu*") in view of "The Internet: a tutorial" to *Crowcroft* in further view of U.S. Patent No. 6,992,982 B1 to *Meyer et al.* ("*Meyer*") and in further view of

Art Unit: 2616

“Domain-based access control for distributed computing systems” to *Robinson et al.* (“*Robinson*”).

As to **claim 41**, see similar rejection to claim 33.

10. **Claim 42** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,068,624 B1 to *Dantu et al.* (“*Dantu*”) in view of “The Internet: a tutorial” to *Crowcroft* in further view of U.S. Patent No. 6,992,982 B1 to *Meyer et al.* (“*Meyer*”) and in further view of U.S. Patent No. 6,360,093 B1 to *Ross et al.* (“*Ross*”).

As to **claim 42**, see similar rejection to claim 34.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Wellington Chin can be reached on (571)272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

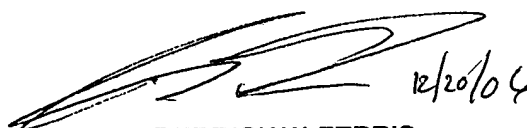
Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DWF

Derrick W. Ferris
Examiner
Art Unit 2616



12/20/04

DERRICK W. FERRIS
PRIMARY PATENT EXAMINER